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NOTICE OF ALLOWANCE AND FEE(S) DUE

99435 7590 05/31/2011 Myers Andras Sherman & Zarrabian LLP 1411 5th Street, Suite 306 Santa Monica, CA 90401 EXAMINER

TRAN, MYLINH T

ART UNIT PAPER NUMBER

2179

DATE MAILED: 05/31/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/592,599	06/12/2000	Dongyan Wang	SAM1.PAU.64	7070

TITLE OF INVENTION: HOME NETWORK DEVICE INFORMATION ARCHITECTURE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	08/31/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

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maintenance fee notification

99435 759n 05/31/2011

Myers Andras Sherman & Zarrabian LLP 1411 5th Street, Suite 306 Santa Monica, CA 90401

Number is required.

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Feeds () Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (5/1) 273-2885, on the date indicated below.

(Depositor's name (Signature (Date

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 09/592 599 06/12/2000 Dongvan Wang SAMI PALL 64 7070 TITLE OF INVENTION: HOME NETWORK DEVICE INFORMATION ARCHITECTURE

APPLN, TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 SO 50 \$1510 08/31/2011 APTIMIT CT ASSISTRCT ASS TRAN MYLINH T 2179 345-326000

1. Change of correspondence address or indication of "Fee Address" (37 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

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(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): 🔲 Individual 🚨 Corporation or other private group entity 🚨 Government 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ Issue Fee A check is enclosed.

Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached.

Advance Order - # of Copies The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office

Authorized Signature Date

Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time your require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patert and Trademark Officer. U.S. Peterstreat of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450.

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09/592,599	06/12/2000 Dongyan Wang		SAM1.PAU.64	7070
99435 7590 05/31/2011 Myers Andras Sherman & Zarrabian LLP		EXAMINER		
		TRAN, MYLINH T		
1411 5th Street, Su				
Santa Monica, CA 90401		ART UNIT	PAPER NUMBER	

2179 DATE MAILED: 05/31/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 103 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 103 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2): (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom
 of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of
 records may be disclosed to the Department of Justice to determine whether disclosure of these
 records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement necotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his-fher designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2004 and 2006. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability

Application No.	Applicant(s)		
09/592,599	WANG ET AL.		
Examiner	Art Unit		
MYLINH TRAN	2179		

The MAILING DATE of this communication appears on the cover sheet with the correspondence address
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308

- This communication is responsive to <u>04/21/2011</u>.
- The allowed claim(s) is/are 1-6,8-14,18-24 and 28-32, 34.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) ☐ Some* c) ☐ None of the: a) \square All
 - Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: . .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date (b) I including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 - Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of
- each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6.

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the
- attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9.
 Other

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael Zarrabian on 05/09/2011.

The application has been amended as follows:

Cancel claim 33.

Claim 1:

A method for controlling devices that are currently connected to a physical layer of a network, the method comprising the steps of:

for at least one of said devices:

- (a) discovering a plurality of devices that are currently connected to the network;
- (b) obtaining information for commanding and controlling at least one of the plurality of devices by at least one other device currently connected to physical layer of the network, wherein the information includes at least a device name and service type, and wherein the physical layer provides a communication medium that can be used by the plurality of devices to communicate with each other; wherein the service type comprises a type of service that each device can provide and the user control interface is

Art Unit: 2179

generated and displayed based on at least an attribute and capability of the service type, each reference in the

user interface includes at least one hyper-text link providing direct access from the user interface to at least the user control interface description, the user interface includes device data corresponding to each device based on the information obtained from each device, and upon the one link in the user interface being user activated, the activated link is used for accessing the associated device and retrieving control interface description contained in the associated device for generating and displaying a device user interface based on the retrieved control interface description, for user interaction with that associated device:

(c) generating a graphical user interface based at least on the obtained information, the user interface including one or more references associated with each of the devices currently connected to the network; and
(d) displaying the generated user interface such that a user can use each reference of the displayed user interface to access each device.

Claim 10:

A network system for performing a service, comprising:

a physical layer providing a communication medium that can be used by connected devices to communicate with each other:

Art Unit: 2179

at least one of the connected devices storing information for user interaction with the at least one device; an agent in the at least one device for:

- (a) discovering the plurality of devices that are currently connected to the physical layer of the network;
- (b) obtaining information for commanding and controlling at least one of the plurality of devices by at least one other device currently connected to the physical layer of the network,

wherein the information includes at least a device name and service type; wherein the service type comprises a type of service that each device can provide and the user control interface is generated and displayed based on at least an attribute and capability of the service type, each reference in the user interface includes at least one hyper-text link providing direct access from the user interface to at least the user control interface description, the user interface includes device data corresponding to each device based on the information obtained from each device, and upon the one link in the user interface being user activated, the activated link is used for accessing the associated device and retrieving control interface description contained in the associated device for generating and displaying a device user interface based on the retrieved control interface description, for user interaction with that associated device;

Art Unit: 2179

(c) generating a graphical user interface based at least on the obtained information, the user interface including one or more references associated with each of the devices currently connected to the network; and

(d) displaying the generated user interface such that a user can use each reference of the displayed user interface to access each device.

Claim 20:

A network system for performing a service, comprising:

a physical layer, wherein the physical layer provides a communication medium than can be used by connected devices to communicate with each other in the network:

multiple devices connected to the physical layer, one or more of the multiple devices storing information for user interaction with that device, and one or more of the multiple devices each including an agent for:

- (a) discovering a plurality of devices that are currently connected to the network in an autonomous manner:
- (b) obtaining information for commanding and controlling at least one of the plurality of devices by at least one other device currently connected to the physical layer of the network, wherein the information includes at least a device name and service type; wherein the service type comprises a type of service that each device can provide and the user control interface is generated and displayed based on at least an attribute and capability of the service type, each reference in the user interface includes at least one hyper-

Art Unit: 2179

text link providing direct access from the user interface to at least the user control interface description, the user interface includes device data corresponding to each device based on the information obtained from each device, and upon the one link in the user interface being user activated, the activated link is used for accessing the associated device and retrieving control interface description contained in the associated device for generating and displaying a device user interface based on the retrieved control interface description, for user interface based at least on the obtained information, the user interface including one or more references associated with each of the devices currently connected to the network; and (d) displaying the generated user interface such that a user can use each reference of the displayed user interface to access each device.

The following is an examiner's statement of reasons for allowance: Claims 1-6, 8-14,18-24, 28-32, and 34 are allowed.

Independent claims 1, 10 and 20, when considered as a whole, are allowable over the prior arts of record. The prior arts of record do not teach or suggest the combination of means, arranged and interacted to perform the step/means for providing a user interface for controlling devices that are currently connected to a network.

Art Unit: 2179

Specially, Hayes et al. teach for at least one of said devices (column 1, lines 12-20); discovering a plurality of devices that are currently connected to the network (figure 1A); obtaining information for commanding and controlling at least one of the plurality of devices by at least one other device currently connected to physical layer of the network (column 2, lines 35-50, column 8. lines 12-26, wherein Haves et al. teach "The HAVi allows control information to be transferred between devices at two levels"), wherein the information and including at least a device name and service type (column 6, lines 1-35 and column 8. lines 12-25; wherein Haves et al. show a 8 bit ID identifying the device to allow different versions of the same device type to exist and a device number); wherein the physical layer provides a communication medium that can be used by the plurality of devices to communicate with each other (figure 1A); generating a graphical user interface based at least on the obtained information (column 8, lines column 12, lines 28-40, wherein Hayes et al. cite "since the HAVi standard allows an ongoing two-way dialog between the controlled and controlling devices, the remote control display an" configuration can be updated dynamically during use of the system"). while Naughton teach et al. the reference associated with each of the device and displaying the generated user interface such that a user can use each reference of the displayed user interface to access each device (column 22, lines 42-65, wherein Naughton shows the handheld display device then transmits the appropriate commands that turn the television on or off. Similarly, if the user selects any of the television channel buttons 66-69, the

Art Unit: 2179

television channel button anticipates and the hand-held display device transmits the appropriate commands to the real television thereby tuning the television to the selected channel).

However, none of the references teach the features of the service type comprises a type of service that each device can provide and the user control interface is generated and displayed based on at least an attribute and capability of the service type, each reference in the user interface includes at least one hyper-text link providing direct access from the user interface to at least the user control interface description, the user interface includes device data corresponding to each device based on the information obtained from each device, and upon the one link in the user interface being user activated, the activated link is used for accessing the associated device and retrieving control interface description contained in the associated device for generating and displaying a device user interface based on the retrieved control interface description, for user interaction with that associated device.

With such limitations, the Examiner deems this application in condition for allowance over the prior arts made of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mylinh Tran. The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM at 571-272-4141.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo, can be reached at 571-272-4847.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

571-273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mylinh Tran

Art Unit 2179

/Weilun Lo/

Supervisory Patent Examiner, Art Unit 2179